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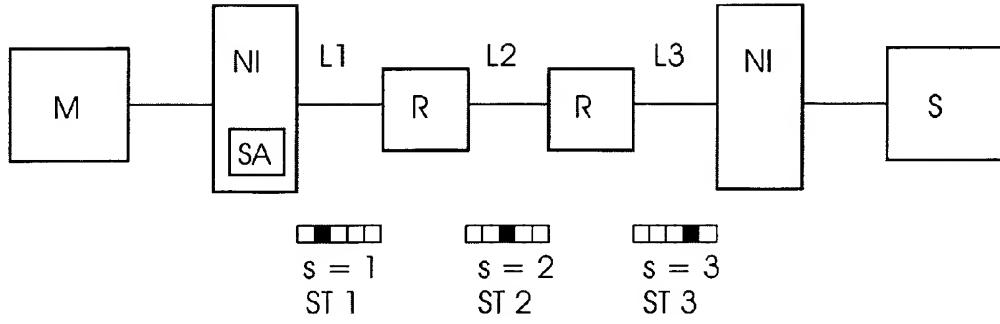
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(54) Title: INTEGRATED CIRCUIT AND METHOD FOR TIME SLOT ALLOCATION



(57) **Abstract:** An integrated circuit comprising a plurality of processing modules (M, S; IP) and a network (N) arranged for coupling said modules (M, S; IP) is provided. Said integrated circuit further comprises a plurality of network interfaces (NI) each being coupled between one of said processing modules (M, S; IP) and said network (N). Said network (N) comprises a plurality of routers (R) coupled via network links (L) to adjacent routers (R). Said processing modules (M, S; IP) communicate between each other over connections using connection paths (C1-C12) through the network (N), wherein each of said connection paths (C1-C12) employ at least one network link (L) for a required number of time slots. At least one time slot allocating unit (SA) is provided for computing a link weight factor for at least one network link (L) in said connection path (C1-C12) as a function of at least one connection requirement for said at least one network link (L), for computing a connection path weight factor for at least one connection path (C1-C12) as a function of the computed link weight factor of at least one network link (L) in said connection path (C1-C12), and for allocating time slots to said network links (L) according to the computed connection path weight factors.



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